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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,832	11/16/2001	Satoru Wakao	35.C15945	7584

5514 7590 04/12/2007
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EXAMINER

YE, LIN

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/987,832

Applicant(s)

WAKAO ET AL.

Examiner

Lin Ye

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-14 and 16-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-14 and 16-38 is/are rejected.
- 7) ☒ Claim(s) 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 2, 4-14 and 16-38 filed on 12/20/06 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim 36 objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim does not refer to a preceding claim. See MPEP § 608.01(n). Accordingly, the claim 36 not been further treated on the merits.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-14, 16-37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondoh et al. U.S. Patent 6,968,058 in view of Kobayashi et al. U.S. Patent 7,124,094

Referring to claim 1, the Kondoh reference discloses in Figures 1, 8 and 9, an image verification system comprising an image generation device (digital camera system 100, see Col. 4, lines 47-59) and a first image verification device (alteration inspection unit 101, see

Col. 5, lines 7-25 or image sever system 107, see Col. 9, lines 62-67), wherein said image generation device includes: an image data generation unit (image pickup device 2) adapted to generate image data; and a first verification data generation unit (MAC generating unit 11) adapted to generate first verification data (MAC as shown in Figure 2, MAC1 shown in Figure 9, step S1) from the image data and using first information (file header information) (see Col. 4, lines 60-67, Col. 5, lines 1-7 and Col. 10, lines 14-17), and wherein said first image verification device includes: a first verification unit (MAC verification unit 73, see Col. 10, lines 13-25) adapted to verify, using the image data, said first verification data and said first information, whether the image data is altered or not and a second verification data generation unit (MAC generating unit 88) adapted to generate second verification data from image data using second information (editing history) and public key cryptography, if it is verified by the first verification unit that the image data is not altered (See Col. 10, lines 29-67). However, the Kondoh reference does not explicitly show a first verification data generation unit adapted not using public key cryptography.

The Kobayashi reference teaches in Figure 12, an image verification system comprising a verification data generation unit can common key cryptography method to encrypting image data instead of only using public key cryptography (See Col. 54, lines 30-35 and Col. 10, lines 35-54). The Kobayashi reference is evidenced that one of ordinary skill in the art at the time to see more advantages for the image verification system using common key cryptograph method to encrypting image data instead of only public key cryptography so that when an amount of image data is large, processing speed is higher for the common key encryption system because an amount of processing caused by encryption is reduced (See

Col. 54, lines 35-41). For that reason, it would have been obvious one having ordinary skill in the art at the time of the invention was made to modify the image verification system of the Kondoh ('058) by providing the first verification data generation unit adapted not using public key cryptography as taught by Kobayashi ('094).

Referring to claim 2, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 1, and the Kondoh reference discloses wherein the first verification data generation unit generates the first verification data from the image data using the first information (file header information), a hash function (MD) (See Col. 1, lines 41-58) and common key cryptography (See Kobayashi's Col. 54, lines 30-41 and examiner's comments in claim 1); and wherein said second verification data generation unit generates said second verification data using a hashing function and public key cryptography (See col. 9, lines 8-15 and 10, lines 19-67).

Referring to claim 4, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 1, and the Kondoh reference discloses wherein, if it is verified by the first verification unit that the image data is altered, the second verification data generation unit disables generation of the second verification data (e.g., only the image is not altered, the image file input to image editing unit. The second verification data MAC2 depends on editing history, see Figure 9, S6-S7).

Referring to claim 5, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 1, and the Kondoh reference discloses wherein the first image verification device includes a memory (storage medium 70) for storing a

correspondence relationship between the first information (image header information) and the second information (editing history) as shown in Figure 9 (see Col. 11, lines 1-5).

Referring to claim 6, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 1, and the Kondoh reference discloses wherein the first information is ID information for identifying said image generation device (see Col. 7, lines 65-67 and Col. 8, lines 1-2).

Referring to claim 7, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 1, and the Kobayashi reference discloses wherein the first information is an encryption key used in common key cryptography (See Col. 54, lines 30-41) and the Kondoh reference discloses said second information is a private key used for public key cryptography (See Col. 10, lines 55-67).

Referring to claim 8, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 1, and the Kondoh reference discloses wherein a second image verification device includes a second verification unit adapted to verify, using said image data, the second verification data and third information corresponding to said second information, whether said image data is altered or not (see Col. 10, lines 3-67).

Referring to claim 9, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 8, and the Kondoh reference discloses wherein the second information is a private key used for public key cryptography and the third information is a public key used for public key cryptography (see Col. 10, lines 29-61).

Referring to claim 10, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 8, and the Kondoh reference discloses wherein said

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second image verification device (image server system 107) is a server computer and said first image verification device (alteration inspection unit 101) is a client of the server computer as shown in Figures 1 and 8.

Referring to claim 11, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claims 2 and 8.

Referring to claim 12, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected to claim 1, and the Kondoh reference discloses wherein said image generation device is a digital camera (100) as shown in Figure 1.

Referring to claim 13, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 1.

Referring to claim 14, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 2.

Referring to claim 16, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 4.

Referring to claim 17, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 5.

Referring to claim 18, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 6.

Referring to claim 19, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 7.

Referring to claim 20, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to claim 13, and the Kondoh reference discloses wherein said second device is an IC card as shown in Figure 12.

Referring to claim 21, the Kondoh reference discloses all subject matter as discussed with respect to same comments to claim 10.

Referring to claim 22, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 8.

Referring to claim 23, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 9.

Referring to claim 24, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 10.

Referring to claim 25, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 11.

Referring to claim 26, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 12.

Referring to claim 27, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 1.

Referring to claim 28, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 2.

Referring to claim 29, the Kondoh and Kobayashi references disclose all subject matter as discussed with respect to same comments to claim 7.

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Referring to claim 30, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 4.

Referring to claim 31, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 5.

Referring to claim 32, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 1.

Referring to claim 33, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 2.

Referring to claim 34, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 7.

Referring to claim 35, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 4.

Referring to claim 37, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 6.

Referring to claim 38, the Kondoh and Kobayashi references disclose all subject matter as discussed with respected same comments to claim 6.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

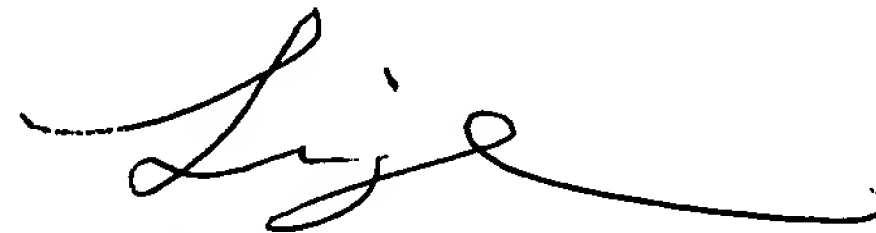
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lin Ye whose telephone number is (571) 272-7372. The examiner can normally be reached on Mon-Fri 8:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Lin Ye
Primary Examiner
Art Unit 2622

March 23, 2007